User Manual

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Prerequisites

This application needs a computer with Microsoft® Windows® 7.0 or later installed and version 4.5 of the Microsoft® .NET framework.

Installation

Run the Windows Installer Package named **Magellan.msi** and follow the displayed instructions.

Before the program will run you will need to copy a valid license file into the default Magellan installation folder – C:\Program Files (x86)\Meyertech\Magellan. (Please See licensing procedure below).

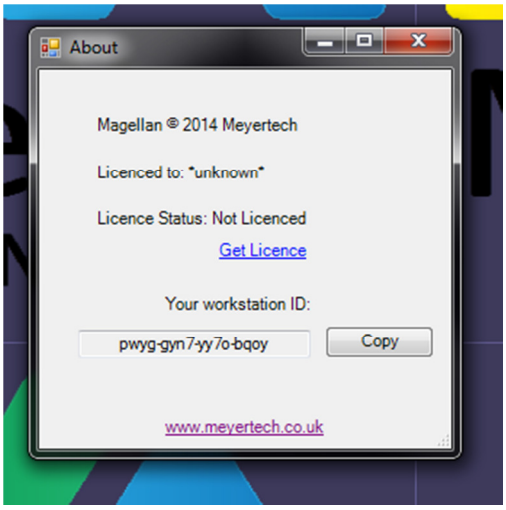
Licensing

Licensing procedures

Once Magellan is installed on your workstation, a license file has to be issued. Without a license file, Magellan will only offer limited functionality.

In the top right hand corner of your user-interface, click the about button marked.

This is where your license status and your workstation ID are found.



The user is required to copy the workstation ID and email it to Magellan@meyertech.co.uk

The workstation ID is needed to create your license file.
Once we have received the email, we will generate your license file and email you back with a valid license.

To activate the license, copy the license file (.lic) into your Magellan folder. This should be located in C:/program files/meyertech/magellan (32 bit Windows) or C:/program files (x86)/meyertech/magellan (64 bit Windows).

Local Configuration

This application does not need any additional configuration in order to operate.

Enabling ONVIF

ONVIF is enabled by default and Network Video Transmitters should be automatically discovered providing: -

1. The NVT's have been enabled for Onvif discovery.
2. There are no restrictive firewalls in place.

Section 1 - System Overview

Magellan is an ONVIF Profile-S Network Video Client (NVC) designed to run on Windows 7 or later.

With Magellan NVC you can view live ONVIF streams and control PTZ ONVIF cameras.

The Magellan program has been designed to improve the implementation of NVT device interoperability with NVC video management software, through a large scale testing and iterative development proses.

- Developed specifically for NVT manufactures
- Improve NVT interoperability
- Demonstrate your NVT devices easily and without fuss
- Magellan is a 'no-frills' ONVIF NVC which is simple and intuitive to use

Section 2 - Getting Started

To start Magellan double click the shortcut on the PC desktop.
On start-up Magellan will automatically discover all of the NVT devices on the network. Depending on the amount of devices on the network and or speed of the network start-up of the program can take between 2 and 10 seconds.

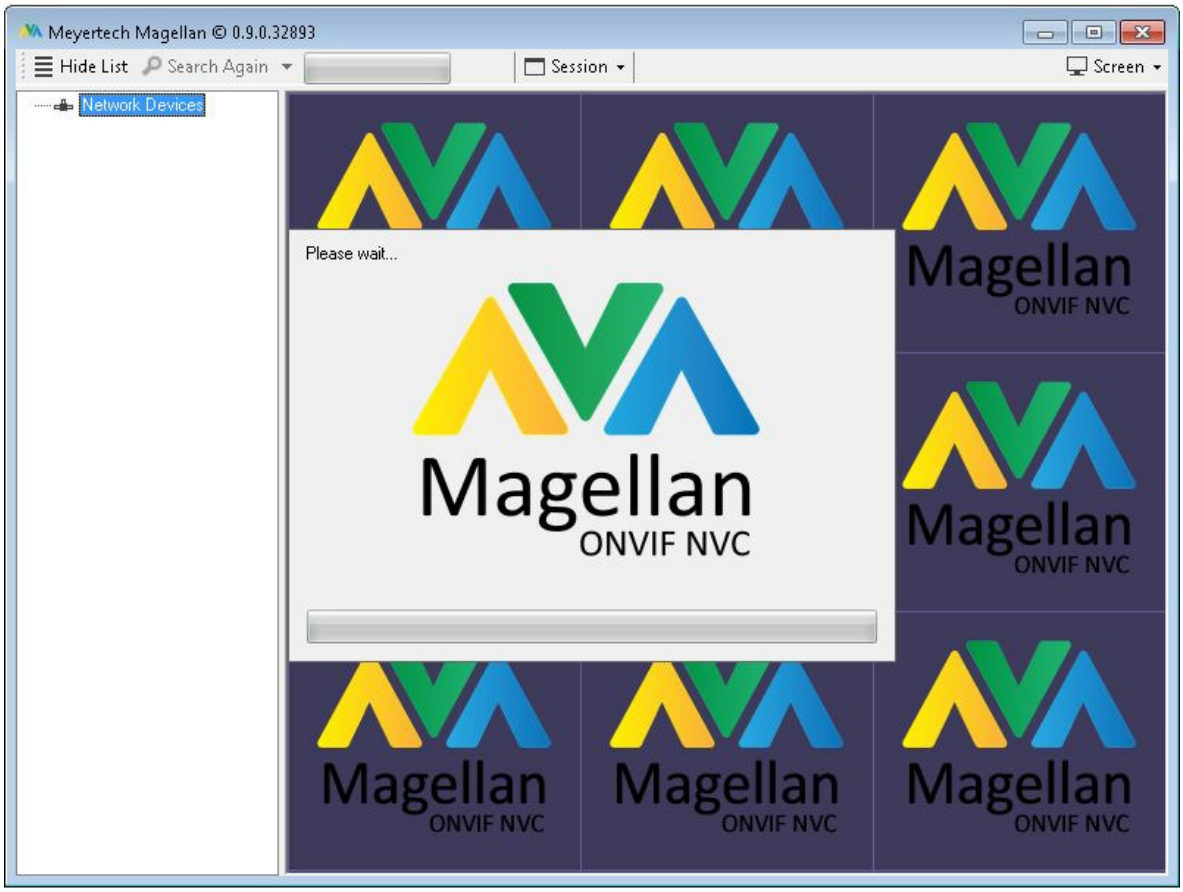


Figure 1.1 – Magellan start-up

Section 3 - The User Interface

Magellan has been designed to offer a very basic easy interface that allows an engineer to quickly discover and configure Onvif devices. Once Magellan has loaded it will load it's 'default' layout window.

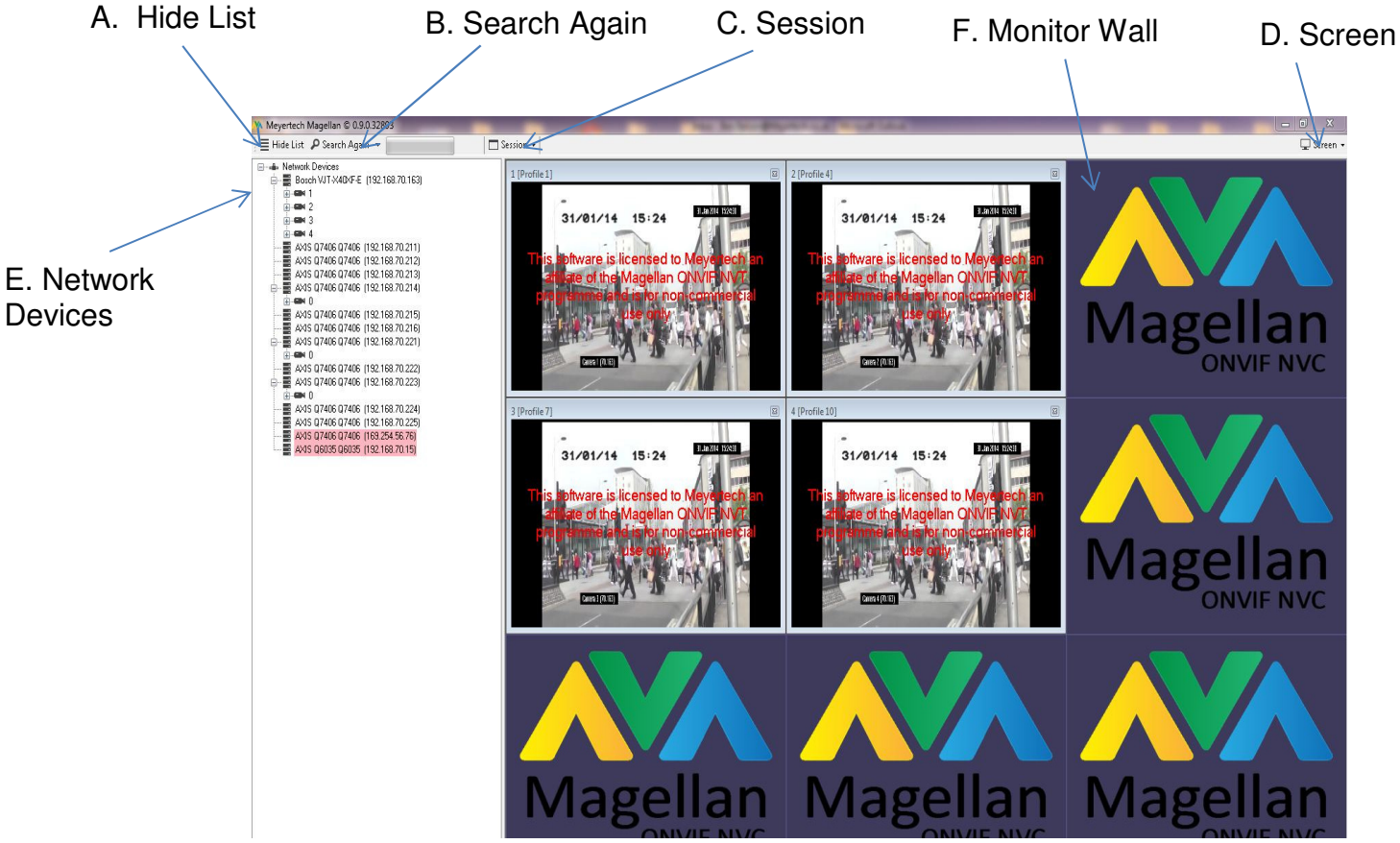


Figure 3.1 – Magellan Interface

A. Hide List Button - Clicking the 'Hide List' option will make the network devices list disappear and maximise the video windows to full screen mode.

B. Search Again Button – Select to force Magellan to search for more devices. This feature is usually used when additional Onvif device credentials are needed. (Please refer to Section 4.1 – Advanced device discovery).

C. Session Button – You can save particular 'sessions' or device layouts so it makes it quicker to access the cameras you require at a later date. Here you can 'Save session' – to save the current layout or 'Recall session' which will retrieve a previously saved session. (Please refer to Section 8.1 – Saving Session)

D. Screen Button – Here you can select custom layouts i.e. the number of video windows you want to display at the same time.

E. Network Devices List – When Magellan loads it will automatically discover Onvif compatible devices on the network and list them in the Network devices list. Here you can navigate through each particular Onvif object and also access the configuration for the devices. **To view a device, drag the object onto the Monitor Wall.**

F. Monitor Wall – Here is where the devices images are presented. You can have a number of different devices showing at once, depending on how the screen layout is set. You can also control your PTZ cameras within the Monitor Wall. (For PTZ controls please see section 6).

Section 4 - Advanced Device Discovery

4.1 - Onvif Credentials

With complex IT networks the common place in today's CCTV systems it is important to be able to access and discover devices that have different Onvif credentials (Usernames and passwords) and are located across multiple subnets.

Magellan allows you to configure an infinite number of Onvif user credentials so that any combination of devices should be discoverable.

1. Select the down arrow button from the 'Search Again' menu to access the 'Matching credentials' menu. (See figure 4.1 below).

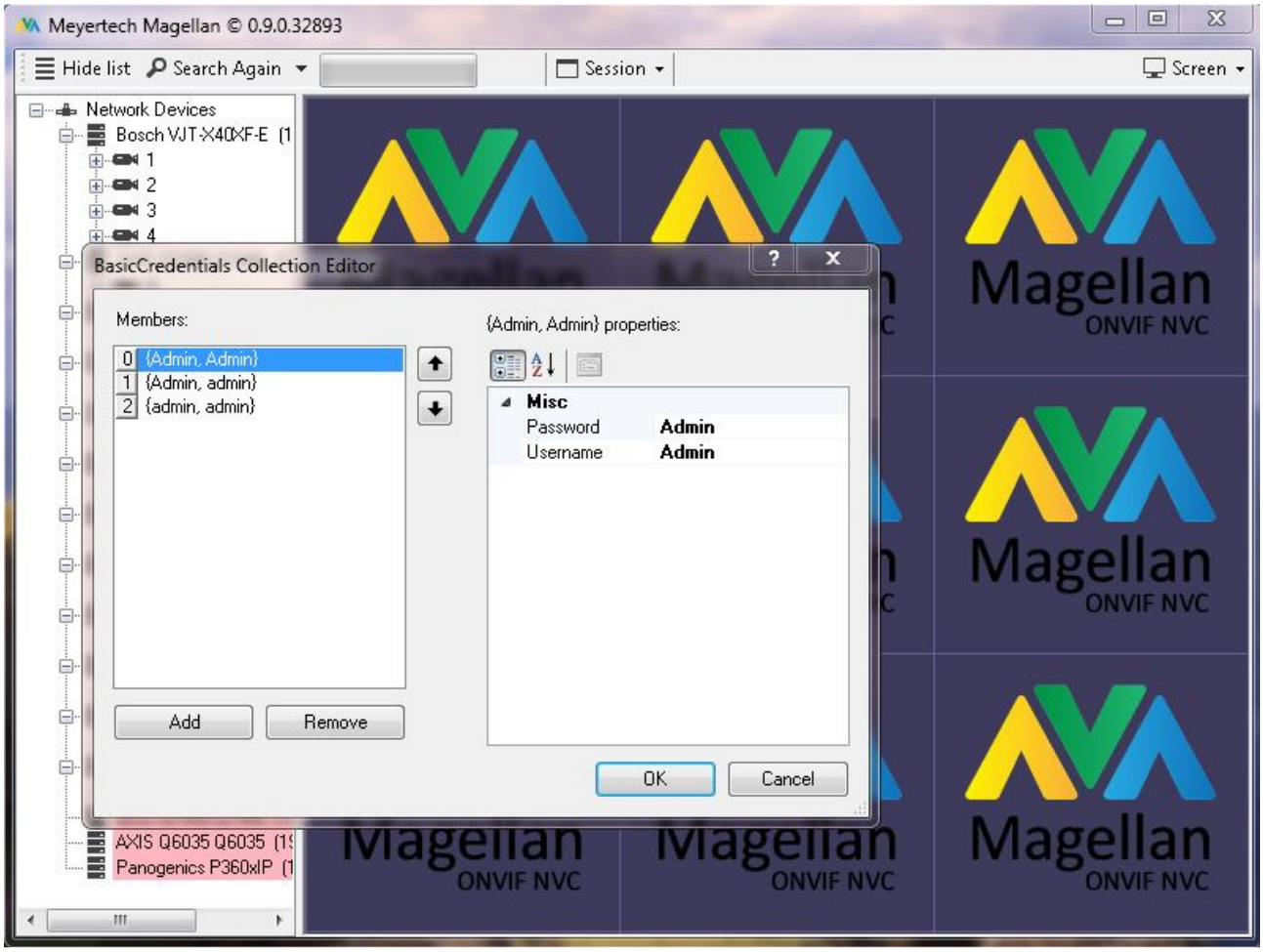


Figure 4.1 – Magellan Onvif Users

Enter any combination of Onvif service usernames and passwords in the box above.

4.2 - Manual Device Discovery

Sometimes Onvif devices cannot be discovered using the traditional method over complex IP networks. This is due to the nature of modern day firewalls and particularly corporate networks. Magellan will allow you to bypass the traditional Onvif discovery method if the networks are becoming a problem.

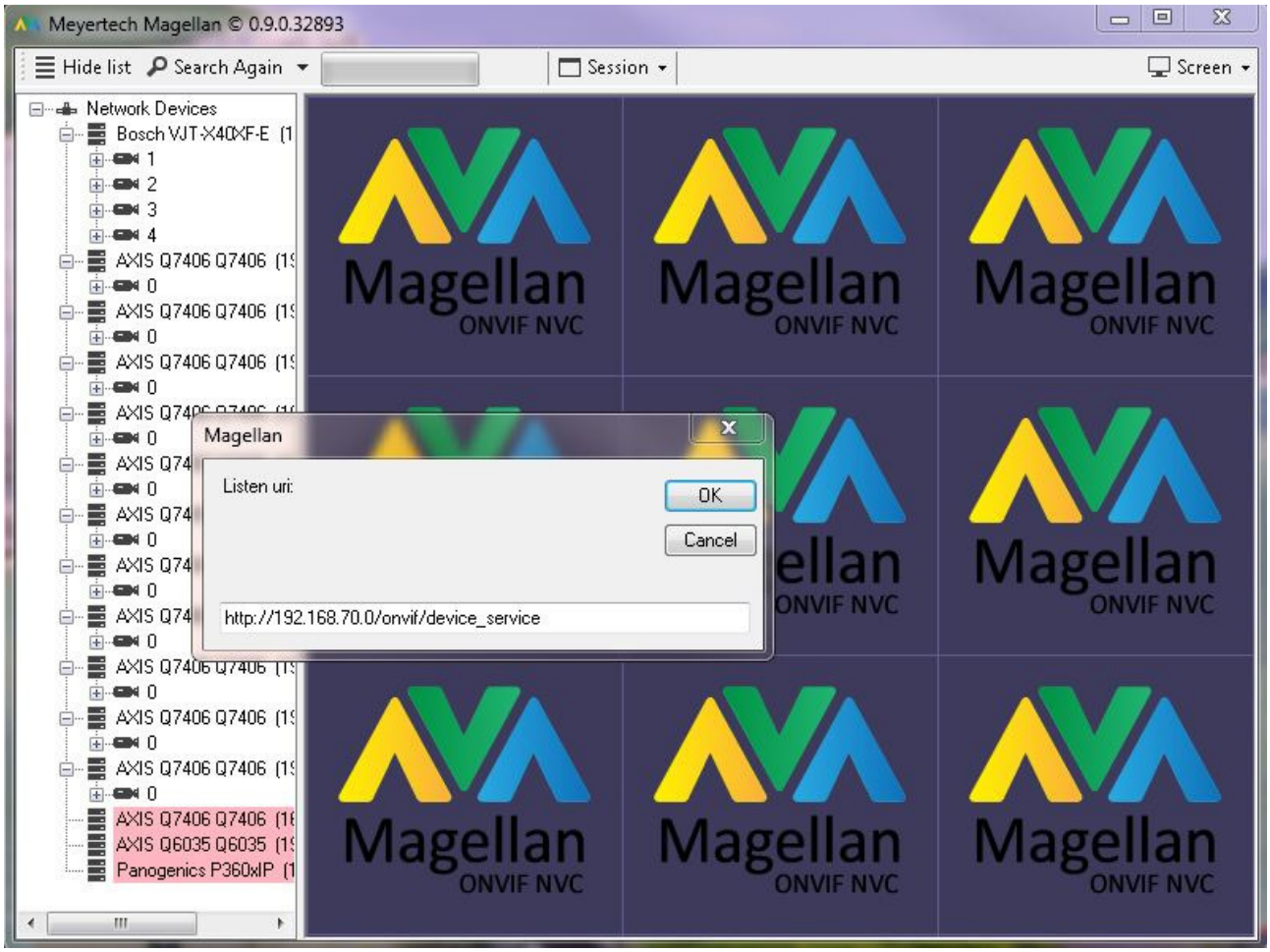


Figure 4.2 – Manual Onvif Discovery

1. Select the drop down arrow from the Search Again menu.
2. Select 'Manually Add Device' from the list of options.
3. Launch the 'Manually Add Device' window to type in the address for the Onvif device service.

Section 5 - NVT Configuration

5.1 - Configure device name

To configure the name of a discovered NVT device, right click and select Device name …

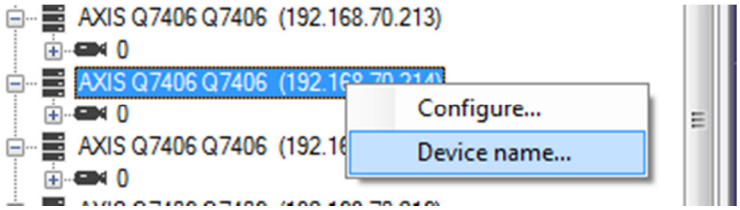


Figure 5.1 Device Name

Type in the desired name of the device into the text box, located in the Set device name menu.

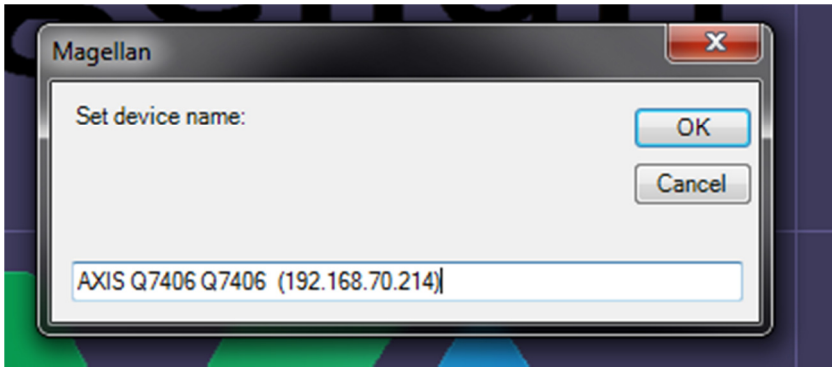


Figure 5.1.2 Set device name

5.2 - Configure device

To configure any ONVIF camera that has been found on the network, you have to right click on the desired device and select Configure…

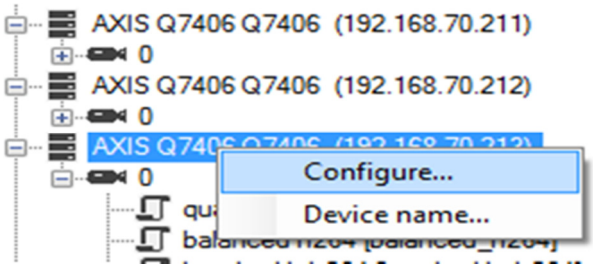


Figure 5.2 Network Devices

This opens up a configure device menu. Where you can change device profiles and encoder configurations, view PTZ components, set credentials, view device information and service addresses.

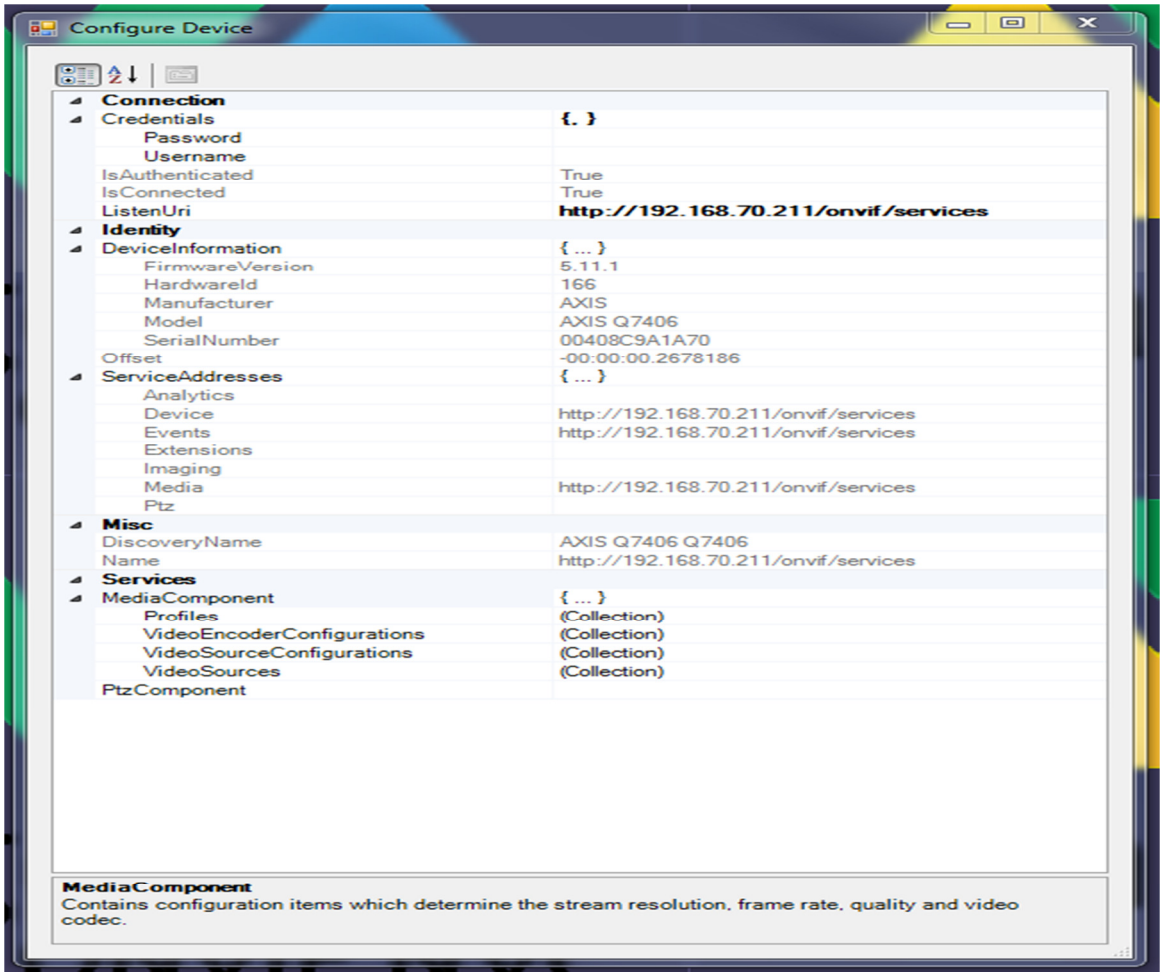
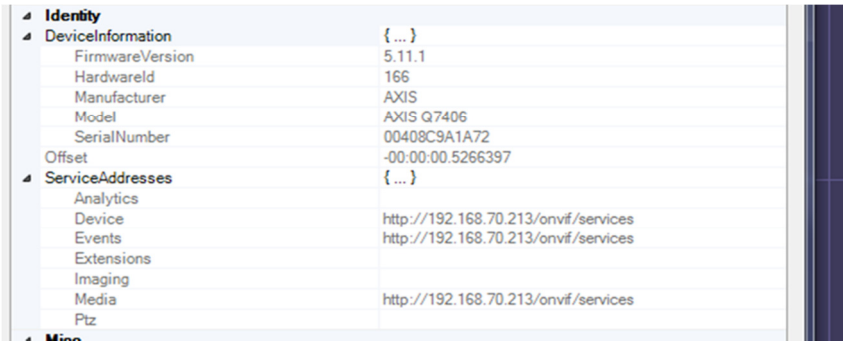


Figure 5.2.2 Configure device menu

Highlighting a particular menu will provide an explanation in the text box at the bottom of the window. In Figure 5.1.2 the Media Component section is explained.

Device identity Here is where you find all of your devices information, firmware version and service addresses. None of this data can be altered of changed.	

5.3 - Configure NVT properties

To view the profiles of a network device, select profiles which is under, Services>Media Components>Profiles. Then click on the configure button.

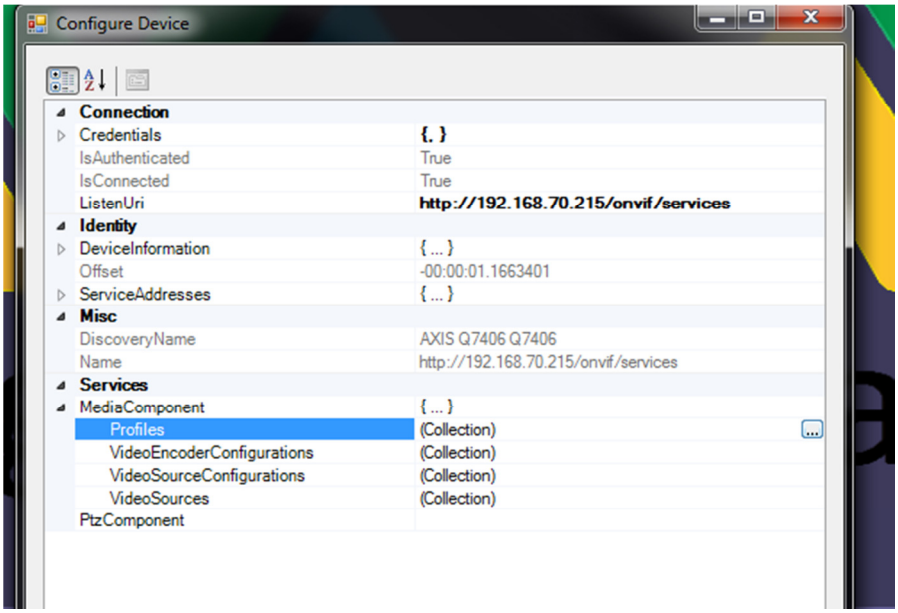


Figure 5.2 Profiles (Configure Device Menu)

In the profile editor menu there will be a list of all the profile members that the current device has saved on it.

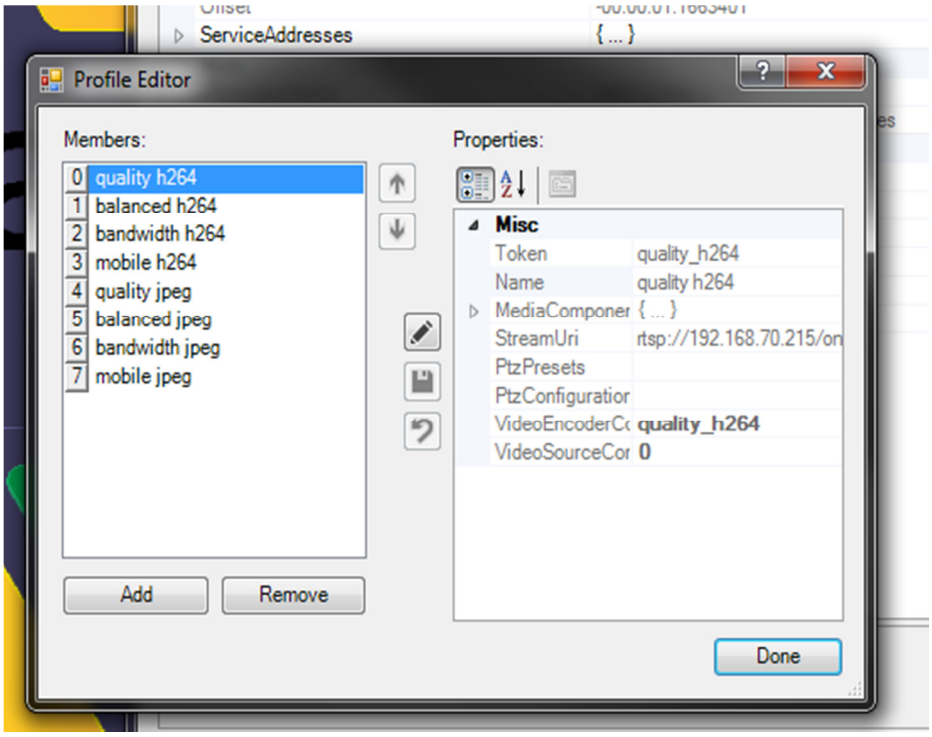


Figure 5.3 Profile Editor

5.3.1 - Video encoder configuration menu

If you expand on media component and open Video encoder configurations. This brings up another editor menu with all the different profiles (members) of that particular encoder.

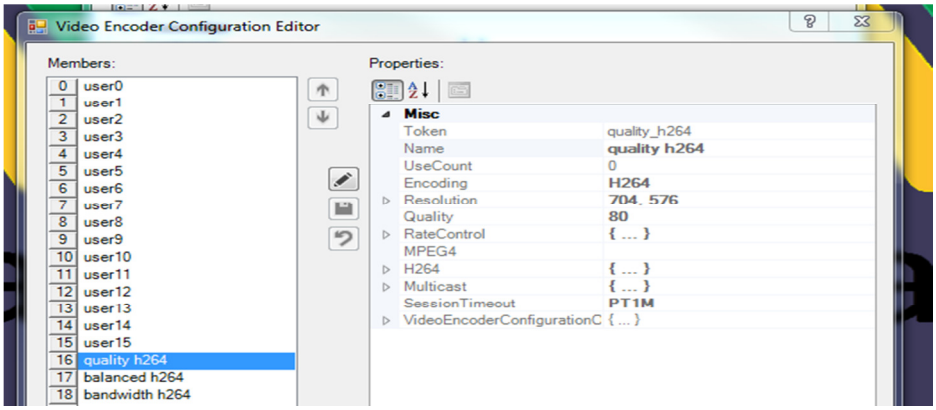
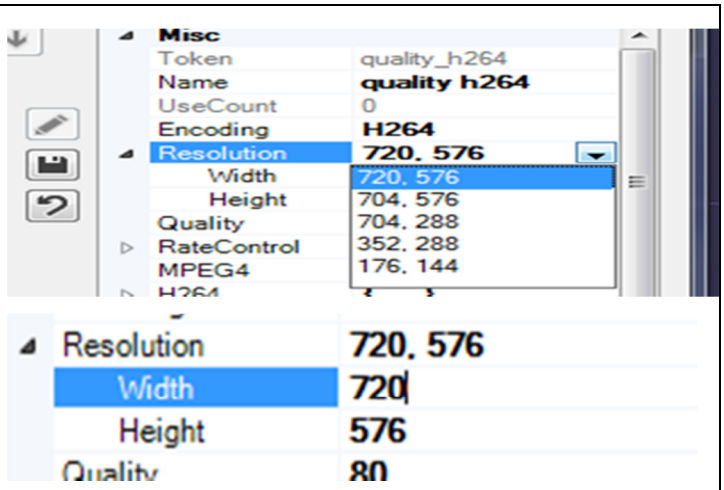
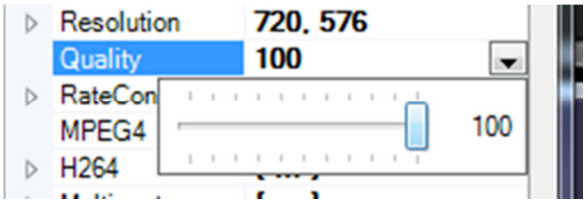
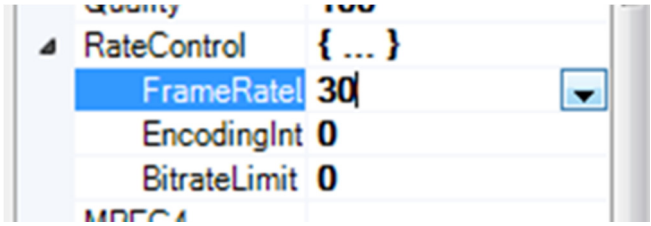
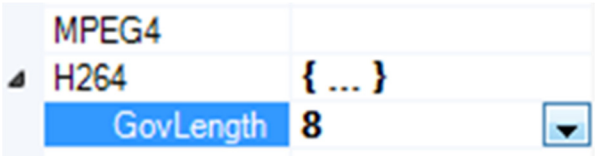
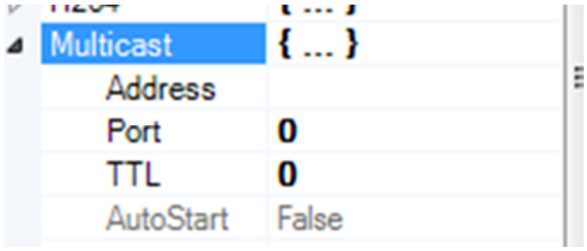
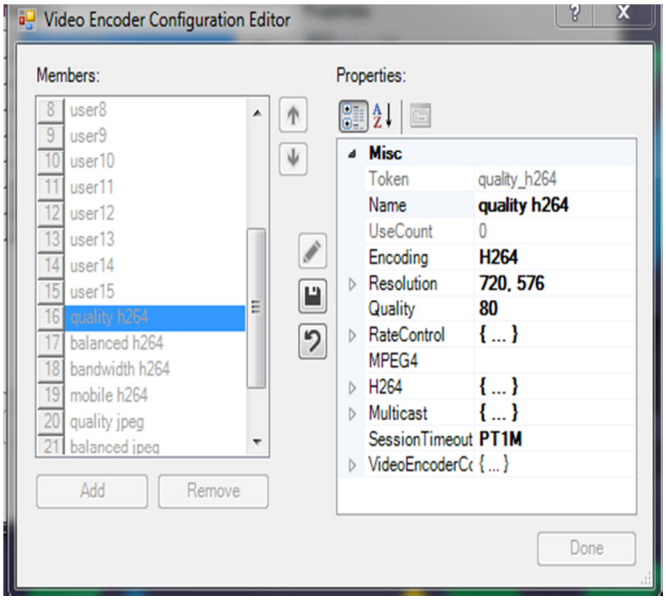


Figure 5.3.1 Video Encoder Configurations

Again select the profile you would like to configure and click the edit button (Example quality H264)

You can change a number of properties like, resolution, quality, frame rate, multicast and encoder format settings.

<u>Resolution</u> To alter the resolution of the devices image, click the drop down box arrow and select form the resolution options. Or you can manually enter in your desired resolution by typing the value into the width and height text box??	
<u>Quality</u> This property allows you to vary the quality of the video image. Simply move the slide bar to set the correct quality.	

Rate control You can alter the frame rate, encoding interval and bitrate limit in the rate control properties. Each setting has its own drop down box with a slide bar where you can change the value. (Depending on certain encoders some might not be available to change)??	
Encoder format settings MPEG/H264 Depending on the encoder format you will only have one of the formats available to change. Altering the GOV length is dependent on the speed of your network. If the GOV length was not set accordingly, then the quality of the video would be affected. Setting the GOV-length to a high value saves considerably on bandwidth, but there may be noticeable image decay.	
Multicast Multicast is used to replicate video streams and reduces the load on network. Type in the Address, port and TTL data to use multicast	
Once you have altered a profiles properties you can save them by clicking the save button located in the centre of the menu. At any point you want to discard the changes you have made, click on the undo button. If you are already viewing the profile that you have configured, then the changes will not be visible until you replace or refresh the window.	

Section 6 – Controlling PTZ Cameras

To control the PTZ camera, the device should be selected and visible on the monitor wall. If a PTZ camera has been selected then a PTZ interface will be visible over the video image.

The PTZ interface is controllable by dragging the red centre circle within the larger blue circle. The further away from the centre you move the cursor, the faster the PTZ camera moves/rotates.

You can also click within the blue circle to move the camera towards the selected direction.

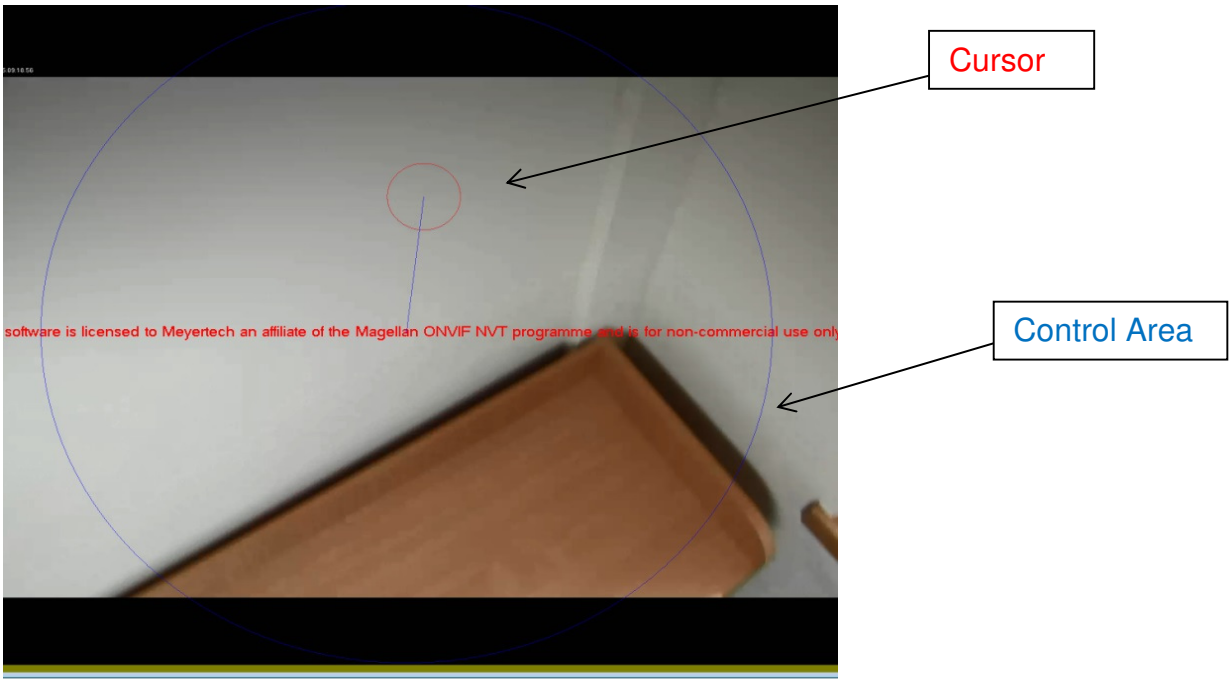

Cursor
Control Area
software is licensed to Meyertech an affiliate of the Magellan ONVIF NVT programme and is for non-commercial use only

Figure 6.1 PTZ Interface

To zoom In and Out of the image you can use the mouse scroll wheel.

Section 7 - Monitor wall configuration

7.1 - Monitor wall layout

The monitor wall is where your devices images are shown and can be laid out in many different ways.

Within the screen button at the top right-hand side of the user interface, you can change the wall layout.

This lets you change your view from a 1x1 grid, 2x2 grid and a 3x3 grid.

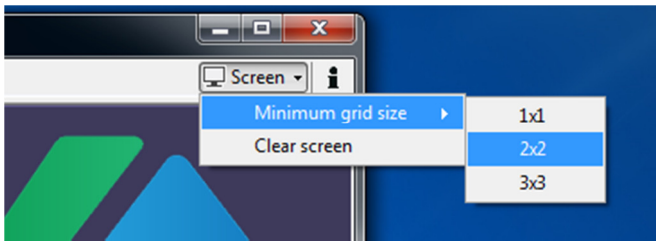


Figure 7.1 Screen Grid Size

Once a device is showing on the monitor wall, you can resize that window to allow you to make custom layouts.

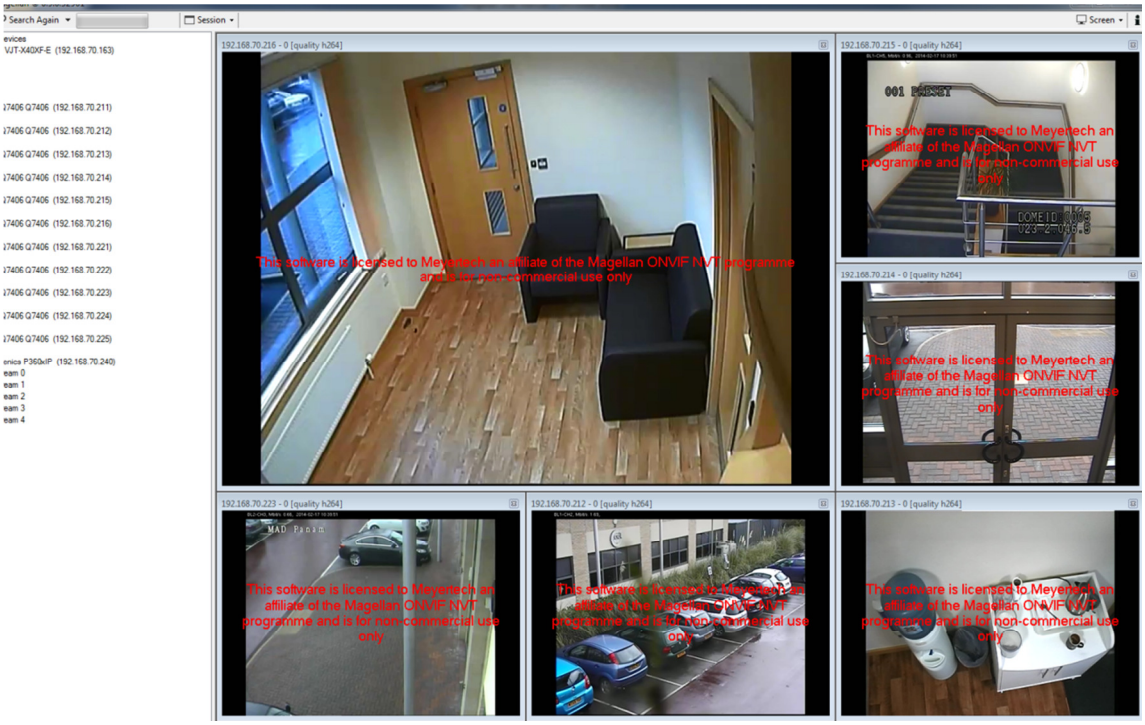


Figure 7.1.2 Monitor Wall Layout

This is a 3x3 layout but with an enlarged window and 5 normal sized windows.

To remove a window from the monitor wall, click the close button.

7.2 - View device profiles

Within your list of discovered network devices the video profiles are displayed beneath the device name. Theses profiles have different encoding formats (jpeg/ h264), Resolutions, quality and frame rate.

To view a certain profile, expand the source of the device you want to view.
A list of different profiles appears. Then simply drag and drop the device profile onto a free space on the monitor wall. You cannot drag a profile onto an image that is already showing.

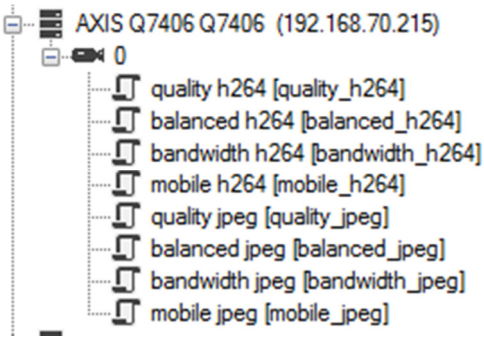


Figure 7.2 View device profiles

Section 8 - Sessions

8.1 - Saving Sessions

Magellan allows you to save sessions, so that on the start-up you can view your previously shown session.

To save a session, open the sessions tab, then select Save Session...

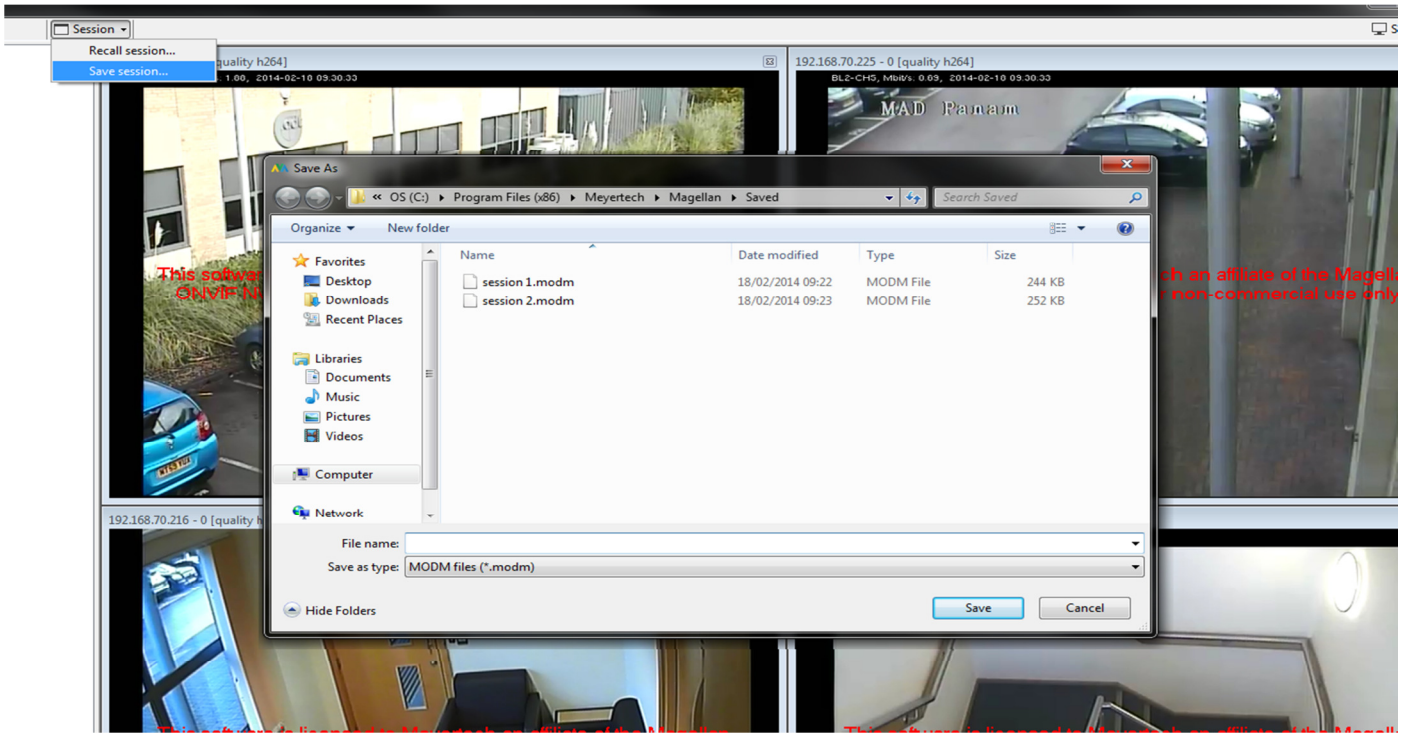


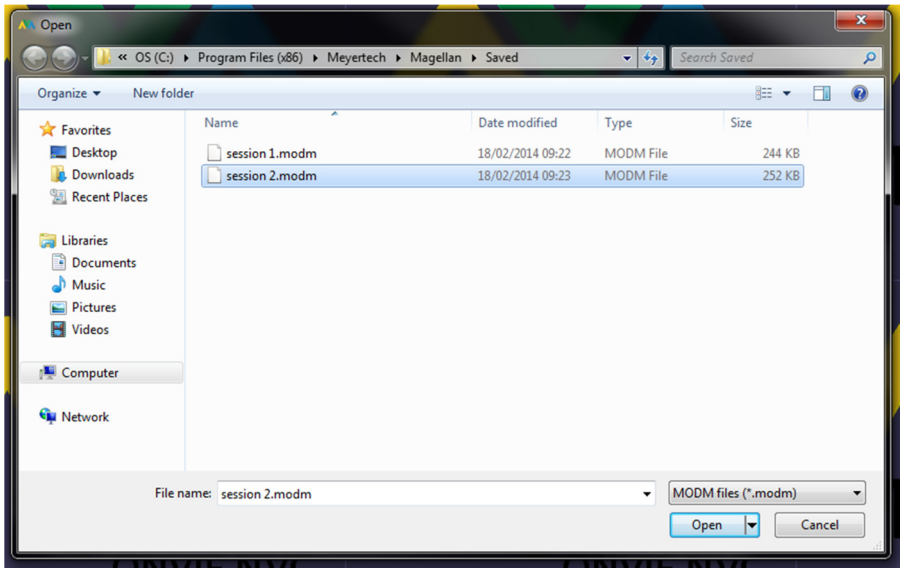
Figure 8.1 Saving Session

Type in the name of the session and then save the file in the desired folder (location).

8.2 - Recall session

If you have multiple sessions saved, then you can access them by opening the sessions tab and selecting Recall Session…

Here you can choose from the session you have previously saved.



. *Figure 8.2 Recall Session*

Once opened, the current layout will be replaced with the selected session layout.

Section 9 – NVT Program Affiliate Feedback

As an affiliate of the programme you are expected to "Get Involved" which means testing your ONVIF devices with Magellan NVC and reporting your findings to Meyertech.

The Magellan programme will be completely managed by Meyertech in an open and transparent manner. Other than testing there is nothing else for an affiliate to do. Meyertech will provide affiliates with support, quarterly reports, exposure on the Meyertech website, access to the Magellan group on LinkedIn and opportunities for joint marketing initiatives.

1. To report back your findings please log in to the Magellan portal at http://magellan.meyertech.co.uk and click the 'NVT Feedback link'.

2. Alternatively you can print out the table below and email it back to Magellan@meyertech.co.uk.

NVT Device	Device Model	Device firmware version	Was your device discoverable? (Y/N)	Were you able to edit video profiles? (Y/N)	Do the PTZ functions work? (Y/N)	Date
1						
2						
3						
4						
5						
6						
7						

We look forward to receiving your valuable feedback.

Support Issues

Our support team will be happy to help with any problem you may experience relating to the installation or operation of Magellan.

NB: - This is a new product and we will be making constant improvements to it over the coming months. Please keep up to date via the Magellan NVT programme.

1. Email support – For any technical queries relating to Magellan email magellan@meyertech.co.uk